ABSTRACT

A method and apparatus for acquiring and processing electrical signals produced by a patient's heart. The apparatus includes fewer than ten electrodes for attachment to the patient. Each electrode is attached in a respective one of the standard ten-electrode, twelve-lead ECG positions. The device includes a signal processor connected to the electrodes for acquiring electrical signals from the electrodes and generating a twelve-lead ECG from the electrical signals. The signal processor generates less than twelve of the leads mathematically.

For the method of the invention, a plurality of less than ten electrodes are attached to the patient. Each electrode is attached in a respective one of the standard ten-electrode, twelve-lead ECG positions. Electrical signals are acquired from the electrodes and a twelve-lead ECG is generated from the acquired electrical signals. Not all twelve leads are generated mathematically.